

# FOOT INSPECTION AND MONOFILAMENT USE GUIDE

A visual foot examination is recommended at every visit.

A more in-depth inspection should be performed at least annually to identify high-risk foot conditions.

An in-depth exam should include an assessment of:

- Protective Sensation
- Vascular Status
- Skin Integrity
- Foot Structure/Biomechanics

## Risk Identification

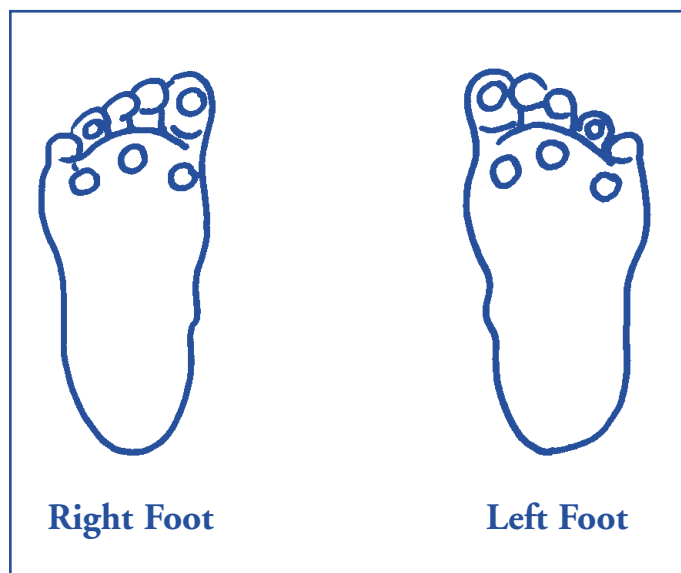
Amputation is most commonly the eventual result of previous minor trauma causing foot injury. The two most common causes of minor foot trauma are ill-fitting new shoes and improper cutting of toenails. The risk of ulcers or amputations is increased in people who have had diabetes  $\geq 10$  years, are male, have poor glucose control, smoke, or have cardiovascular, retinal, or renal complications. Four foot-related conditions are associated with amputation:

1. Peripheral neuropathy
2. Peripheral vascular disease (PVD)
3. History of ulcers or amputation in the other limb
4. Altered biomechanics
  - Evidence of increased pressure (callus, erythema)
  - Limited joint mobility, bony deformity, or nail pathology

## Assessing Protective Sensation

(Use either the Semmes-Weinstein monofilament or a tuning fork.)

- Have the patient look away or close his or her eyes.
- Hold the filament perpendicular to the skin.
- Avoiding any ulcers, calluses, or sores, touch the monofilament to the skin until it bends. Hold in place for approximately 1.5 seconds, then gently remove it.
- Randomly test the sites shown on the diagram to the right.
- Elicit a response from the patient at each site. Lack of sensation at any site may indicate diabetic neuropathy.
- The monofilament may be cleaned with 1:10 sodium hypochlorite solution if contaminated with blood or body fluids.



## Risk Category

### Low Risk

All of the following:

- Intact protective sensation
- Pedal pulses present
- No severe deformity
- No prior foot ulcer
- No amputation

### High Risk

One or more of the following:

- Loss of protective sensation
- Absent pedal pulses
- Severe foot deformity
- History of foot ulcer
- Prior amputation

## Management Guidelines

### Low Risk

- Visual foot exam every routine diabetes visit
- Annual comprehensive lower extremity sensory exam
- Assess/recommend appropriate footwear
- Provide patient education for preventive self-care

### High Risk

- Conduct comprehensive lower extremity exam every 3-6 months
- Demonstrate preventive self-care of the feet
- Refer to specialists and diabetes educator as indicated
- Assess/prescribe appropriate footwear
- Certify Medicare patients for therapeutic shoe benefits
- Note "High Risk Feet" on medical record

(continued on reverse)

### Monofilament Resources

All monofilaments are 5.07 (10 gm.)

#### Lower Extremity Amputation (LEAP) Program

Bureau of Primary Health Care (BPHC)  
Division of Programs for Special Populations  
4350 East West Hwy., 9th Floor  
Bethesda, MD 20814  
1-888-ASK-HRSA  
[www.bphc.hrsa.gov/leap](http://www.bphc.hrsa.gov/leap)

Disposable  
First set of 50: Free  
For orders greater than 50, contact one of the organizations below

#### Medical Monofilament Manufacturing, LLC

116 Long Pond Road  
Plymouth, MA 02360  
1-508-746-7877  
[www.medicalmonofilament.com](http://www.medicalmonofilament.com)

Disposable  
\$0.19-\$0.23 and higher, based on quantity ordered and imprint  
Paper handle may be imprinted with your information

#### Center for Specialized Diabetes Foot Care

P. O. Box 373, 405 Hayden St.  
Belzoni, MS 39038  
1-800-543-9055 ext. 127

Durable  
\$10.00 each

#### Connecticut Bioinstruments

314 W. 231<sup>st</sup> St.  
Riverdale, NY 10463  
1-800-336-1935

Durable  
\$15.00 each

#### North Coast Medical, Inc.

18305 Sutter Blvd.  
Morgan Hill, CA 95037-2845  
1-800-821-9319

Durable  
\$24.95 each  
Set of six, assorted sizes: \$124.95

#### Sensory Testing Systems

1815 Dallas Drive, Suite 11-A  
Baton Rouge, LA 70806  
1-888-289-9293

Durable  
\$10.00 each

#### Sammons, Pruss, Rolyan

P.O. Box 5071  
Bolingbrook, IL 60440  
1-800-558-8633

Durable  
\$19.99 each  
Set of five, assorted sizes: \$99.99

Resource list provided courtesy of the Massachusetts Podiatric Medical Society